Cabin Safety Research Technical Group
March 23-24 1998 CRSTG Meeting Summary

Main Agenda Items:

1. Action review from previous meeting
2. Arrangements for the November 98 International Fire and Cabin Safety Research Conference
3. Briefing on planned new projects
4. Update/co-ordination for on-going projects

1 Action review

Actions completed - covered in meeting summary.

2 International Fire and Cabin Safety Research Conference

Draft session outline was agreed as shown below:

Sessions Outline

Monday November 16 1998

Conference Opening Session

Tuesday November 17 1998

AM

CRASH (structures)	FIRE (General)

PM

CRASH (Injury)	FIRE (Halon Systems)	OPERATIONAL ISSUES
	FIRE (Advanced Materials	

Wednesday November 18 1998

AM

CRASH (Modelling)	OPERATIONAL ISSUES	FIRE(Cargo)	FIRE(Advanced Materials)

PM

CRASH(Workshop)	EVACUATION	FIRE(Cargo Modelling	FIRE(Advanced Materials)

Thursday November 19 1998

AM

EVACUATION(Modelling)	FIRE(Applied Materials)	FIRE(Other systems)

PM

EVACUATION	FIRE(Applied Materials)	FIRE(Waterspray etc.)

Friday November 20 1998

Conference closing session.

3 Briefing on Planned New Projects

1. FAA/JAA Very Large Aircraft Meeting (October 13-16 1998) - CRSTG will ensure that organisers are aware of the November 98 International Fire and Cabin Safety Research Conference.

2. Systematic Study to prioritise cabin safety research - Study amended following CRSTG discussions and will commence shortly under CAA funding.

3. European Burnthrough Consortium - programme to increase fuselage burnthough time by application of improved insulation materials. Meeting late March to finalise programme.

4 Update on ongoing projects

FAA/CAMI

1. Effects of Flight Attendant Location on Aircraft Evacuations Through a Type III Exit With Differing Passenger Motivational Levels: Individual —reviewed results of trials (table distributed during CSRTG meeting). This analysis is continuing.

2. Evacuation Modelling Work—CAMI has an agreement with NIST for analysis of Ed Galea's Air Exodus work. There have been a number of setbacks in getting this analysis completed.

3. NTSB Survival Factor Reports Analysis—CAMI is in the process acquiring this information to compile on CD. The older reports should be compiled on CD by early summer 1998. The more current reports should be analysed by fall 1998.

4. Electronic System to Track Evacuation Subjects—the tracking equipment TCCA has at Cranfield will be sent to CAMI. CAMI developed a set of specifications and sent these out to 30 or so electronic/technology systems companies to see if these companies had similar existing technology.

5. Coopers and Lybrand's Report on Analysis of Flexible Cabin Simulator—CAMI will send a copy of this report to any CSRTG member interested.

6. Chitham Report on Different Methods of Carrying a Child out of an Exit—cataloged behaviors to determine which is better.

FAATC

1. Engine and Cargo Compartment Work

2. Cargo Compartment 'D' to 'C' Work

3. Fuel Tank Explosion Suppression and Protection

4. Hazardous Materials in Cargo Compartments Work

5. Aircraft Blankets Informational Bulletin—FAA Headquarters looking into making this bulletin a non-mandatory TSO.

6. New Aircraft Seat Material—future fire test work will be done on this material. Full-scale tests on seats with this material will be conducted at the FAATC.

7. Thermal Acoustic Insulation—numerous in-flight fires have occurred in the electrical wiring causing the thermal acoustic insulation to ignite. AIA members came to the FAATC and ran some tests on thermal acoustic insulation. Starting to look at the flammability of the thermal acoustic insulation from real (electrical arcing and sparking, etc.) ignition sources and are going to do this in conjunction with the ongoing burnthrough work. There have been a few incidents where this type of ignition has occurred.

8. Life Vest Issue—only required to meet the horizontal bunsen burner test as per a former TSO. The FAR requirement is that they must meet the vertical bunsen burner test. FAA Headquarters is deciding how to handle this issue.

TCCA

Transport Canada has established a major/co-ordinated R&D program to address safety in the various modes of transportation (air, sea and surface). TCCA/Aircraft Certification submitted a proposal for a broad (4-year) program of research in aircraft cabin/fire safety, including co-operative work with our CSRTG 'partners'; this program was judged top priority amongst all the program/projects proposed. This (apparently) means that a major portion of available funding (over that needed to cover existing/on-going projects) should be directed to cabin/fire safety work. We will be developing project specifics over the next few months, in co-ordination with the members of this Group.

CAA

1. Evacuation Modelling This is continuing. Work is continuing on the related AASK database.

2. RAMPS Program at Cranfield University: An early version is being distributed in Europe. A second version will be distributed more widely.

3. FIREDASS: Full-scale tests were completed in Norway some time ago. E. Galea is publishing the fire model. A report is scheduled to be published at the end of 1998.

DGAC

Improved Cabin Attendant Training and Seat-Floor Strength:
Funding has been approved for this work. ***ACTION***: DGAC will distribute a description of the technical portion of this project at the next CSRTG meeting.

Pictogram Study: This work is in support of the JAA Cabin Safety Study Group based on a survey done by Cranfield University. This is a 2- month contract to produce a few prototype pictograms and to run tests to assess different optical criteria. Pictograms are intended to be an alternative to signs on the aircraft such as "EXIT".

European Union

1. Injury Criteria for Enhanced Passenger Safety: Evaluation of data from Warsaw and Kegworth accidents on how these types of injuries could be avoided. Funded by DG7.

2. DYNASAFE: Development of a composite aircraft passenger seat with 3 point harnesses compatible with existing as well as future aircraft floors (DGXII)

Next Meeting:

The next CSRTG meeting will be held on June 18-19, 1998.